



# ARTICLE 7

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## STORMWATER MANAGEMENT

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**7.00.00 PURPOSE AND INTENT**

The purpose and intent of this article is to protect, maintain, and enhance the public health, safety, environment, and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-development stormwater runoff and non-point source pollution associated with new development and redevelopment. Proper management of post-development stormwater runoff will minimize damage to public and private property and infrastructure; safeguard the public health, safety, environment, and general welfare of the public; and protect water and aquatic resources. This article seeks to meet that purpose through the following objectives:

- A. Establish decision-making processes surrounding land development activities that protect the integrity of the watershed and preserve the health of water resources.
- B. Require that new development and redevelopment maintain the predevelopment hydrologic response in their post-development state as nearly as practicable in order to reduce flooding, streambank erosion, non-point source pollution and increases in stream temperature, and maintain the integrity of stream channels and aquatic habitats.
- C. Establish minimum post-development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality.
- D. Establish design and application criteria for the construction and use of structural stormwater control facilities that can be used to meet the minimum post-development stormwater management standards.
- E. Encourage the use of non-structural stormwater management and stormwater better site design practices, such as the preservation of

- open space and other conservation areas, to the maximum extent practicable. Coordinate site design plans, which include open space, with the City's greenspace protection plan.
- F. Establish provisions for the long-term responsibility for and maintenance of structural stormwater control facilities and nonstructural stormwater management practices to ensure that they continue to function as designed, are maintained, and pose no threat to public safety.
  - G. Establish administrative procedures for the submission, review, approval, and disapproval of stormwater management plans and for the inspection of approved active projects, and long-term follow up.

### **7.01.00 DEFINITIONS**

The definitions for Article 7 are located in Article 1.

### **7.02.00 APPLICABILITY**

This article shall be applicable to all land development; including, but not limited to, site plan applications, subdivision applications, and grading applications, unless otherwise exempted. The provisions of this article shall apply to any new development or redevelopment site that meets one or more of the following criteria:

- A. New Development that involves the creation of 5,000 square feet or more of impervious cover, or that involves other land development activities of one (1) acre or more.
- B. Redevelopment that includes the creation or addition of 5,000 square feet or more of impervious cover, or that involves other land development activity of one (1) acre or more.
- C. Any new development or redevelopment, regardless of size, that is defined by the City Engineer to be a "hotspot" land use.
- D. Land development activities that are smaller than the minimum applicability criteria set forth in paragraphs (A) and (B) of this subsection, if such activities are part of a larger common plan of development; even though multiple, separate, and distinct land development activities may take place at different times on different schedules.

### **7.03.00 EXEMPTIONS**

The following activities are exempt from this article:

- A. Development of individual single-family or duplex residential lots that involve the creation of less than 5,000 square feet of impervious cover or that involve other land development activities less than one (1) acre and are not part of a subdivision or phased development project.
- B. Additions or modifications to existing single-family or duplex residential structures that involve the creation of less than 5,000 sq.ft. of impervious cover or that involve other land development activities less than one (1) acre.

- C. Repairs to any stormwater management facility or practice deemed necessary by the City Engineer.

#### **7.04.00 ADMINISTRATION**

The City Engineer shall administer, implement and enforce the provisions of this article.

#### **7.05.00 STORMWATER DESIGN MANUAL**

The City Engineer shall utilize the policy, criteria, and information, including technical specifications and standards, set forth in the Georgia Stormwater Management Manual, as now and hereafter amended, for the proper implementation of the requirements of this article. The manual may be updated and expanded periodically, based on improvements in science, engineering, monitoring, and local maintenance experience.

#### **7.06.00 STORMWATER MANAGEMENT PERMIT REQUIRED**

No owner or developer shall perform any land development activities without first obtaining a stormwater management permit and meeting the requirements of this article prior to commencing the proposed activity. Any owner or developer proposing a land development activity shall first submit a stormwater management permit application to the City Engineer. Applications for a stormwater management permit shall be on a form provided by the City Engineer for that purpose and shall be accompanied by the following items in order to be considered:

- A. Stormwater concept plan and consultation meeting certification in accordance with Section 7.07.00.
- B. Stormwater management plan in accordance with Section 7.08.00.
- C. Inspection and maintenance agreement in accordance with Section 7.09.00, if applicable.
- D. Performance guarantee in accordance with Section 7.10.00, if applicable.
- E. Permit application and plan review fees in accordance with Section 7.11.00.
- F. Construction drawings, stormwater hydrology, and hydraulics report and site analysis.

Applications for a stormwater management permit that are incomplete or which otherwise do not meet the criteria set forth above, as determined by the City Engineer, shall not be reviewed by the City.

#### **7.07.00 STORMWATER CONCEPT PLAN AND CONSULTATION MEETING**

Before any stormwater management permit application is submitted, the landowner or developer shall meet with the City Engineer, or his designee, for a consultation meeting on a concept plan for the post-development stormwater management system to be utilized in the proposed land development project. This consultation meeting shall take place prior to the submission of any development or redevelopment plan. The purpose of this meeting is to discuss the post-development stormwater management measures necessary for the proposed project; as well as to discuss and assess constraints, opportunities, and potential ideas for stormwater management designs before the formal site design engineering is commenced.

### **7.07.01 CONCEPT PLAN REQUIREMENTS**

To accomplish this goal, the following information shall be included in the concept plan, which shall be submitted to the City Engineer a minimum of five (5) business days prior to the meeting:

- A. Existing conditions/proposed site plans. Existing conditions and proposed site layout sketch plans that illustrate, at a minimum, existing and proposed topography; perennial and intermittent streams; mapping of predominant soils from soil surveys (when available); boundaries of existing predominant vegetation and proposed limits of clearing and grading; and location of existing and proposed roads, buildings, parking areas, and other impervious surfaces.
- B. Natural resources inventory. A written or graphic inventory of the natural resources located within a ¼-mile radius of the site as they exist prior to the commencement of the project. This description should include a discussion of soil conditions, forest cover, topography, wetlands, and other native vegetative areas on the site; as well as the location and boundaries of other natural feature protection and conservation areas such as wetlands, lakes, ponds, floodplains, stream buffers, and other setbacks (e.g., drinking water well setbacks, septic setbacks, etc.). Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for development.
- C. Post-development stormwater management system concept plan. A written or graphic concept plan of the proposed post-development stormwater management system, including: preliminary selection and location of proposed structural stormwater controls; location of existing and proposed conveyance systems; flow paths; location of floodplain/floodway limits; relationship of site to upstream and downstream properties and drainages; and preliminary location of proposed stream channel modifications, such as bridge or culvert crossings.
- D. Local watershed plans, and any relevant resource protection plans will be consulted in the discussion of the concept plan.

### **7.08.00 STORMWATER MANAGEMENT PLAN REQUIREMENTS**

- A. The stormwater management plan shall detail how post-development stormwater runoff will be controlled or managed and how the proposed project will meet the requirements of this article, including the performance criteria set forth in Section 7.13.00 of this article.
- B. The stormwater management plan shall be in accordance with the criteria established in this section and must be submitted with the stamp and signature of a design professional, licensed in the State of Georgia, who is qualified to address stormwater issues and who must verify that the design of all stormwater management facilities and practices meet the requirements of the Georgia Stormwater Management Manual and the City's Design and Construction Standards.
- C. The stormwater management plan must ensure compliance with the requirements and criteria in this article and minimize adverse post-development stormwater runoff impacts from the development. The plan shall consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed stormwater management system. The plan shall include all of the information required by the Georgia Stormwater Management Manual and the City's Design and Construction Standards. This includes:
  - 1. Common address and legal description of site.
  - 2. Vicinity map.
  - 3. Existing conditions hydrologic analysis. The existing conditions hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of existing site conditions with the drainage basin boundaries indicated; acreage, soil types, and land cover of areas for each sub-basin affected by the project; all perennial and intermittent streams and other surface water features; all existing stormwater conveyances and structural control facilities; direction of flow and exits from the site; analysis of runoff provided by off-site areas upstream of the project site; and methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. For redevelopment sites, predevelopment conditions shall be modeled using the established guidelines for the portion of the site undergoing land development activities.
  - 4. Post-development hydrologic analysis. The post-development hydrologic analysis for stormwater runoff rates, volumes, and velocities, which shall include: a topographic map of developed site conditions with the post-development drainage basin boundaries indicated; total area of post-development impervious surfaces and other land cover areas for each sub-basin affected by the project; calculations for determining the runoff volumes that need to be addressed for each sub-basin for the development project to meet the post-development stormwater management performance criteria in Section 7.13.00 of this article; location and

- boundaries of proposed natural feature protection and conservation areas; documentation and calculations for any applicable site design credits that are being utilized; methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology. If the land development activity on a redevelopment site constitutes more than 50 percent of the site area for the entire site, then the performance criteria in Section 7.13.00 of this article must be met for the stormwater runoff from the entire site.
5. Where the existing development is to be redeveloped, the applicant should attempt to make every reasonable effort to provide water quality and detention for the total land area of the redeveloped site, which may include but not be limited to underground detention and subsurface water quality treatment.
  6. Stormwater management system. The description, scaled drawings, and design calculations for the proposed post-development stormwater management system shall include a map and/or drawing of the stormwater management facilities, including the location of non-structural site design features and the placement of existing and proposed structural stormwater controls, including design water surface elevations, storage volumes available from zero to maximum head, location of inlet and outlets, location of bypass and discharge systems, and all orifice/restrict or sizes; a narrative describing how the selected structural stormwater controls will be appropriate and effective; cross-section and profile drawings and design details for each of the structural stormwater controls in the system, including supporting calculations to show that the facility is designed according to the applicable design criteria; a hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms (including stage-storage or outlet rating curves, and inflow and outflow hydrographs); documentation and supporting calculations to show that the stormwater management system adequately meets the post-development stormwater management performance criteria in Section 7.13.00 of this article; drawings, design calculations, elevations and hydraulic grade lines for all existing and proposed stormwater conveyance elements, including stormwater drains, pipes, culverts, catch basins, channels, swales and areas of overland flow; and where applicable, a narrative describing how the stormwater management system corresponds with any watershed protection plans and/or local greenspace protection plan.
  7. Post-development downstream analysis. A downstream peak flow analysis, which includes the assumptions, results and supporting calculations to show safe passage of post-development design flows downstream. The analysis of downstream conditions in the report shall address each and every point or area along the project site's boundaries at which runoff will exit the property. The analysis shall focus on the portion

- of the drainage channel or watercourse immediately downstream from the project. This area shall extend downstream from the project to a point in the drainage basin where the project area is ten (10) percent of the total basin area. In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. The analysis shall be in accordance with the Georgia Stormwater Management Manual.
8. Construction-phase erosion and sedimentation control plan. An erosion and sedimentation control plan which satisfies the requirements of Article 3 of this UDO. The plan shall also include information on the sequence/phasing of construction and temporary stabilization measures and temporary structures that will be converted into permanent stormwater controls.
  9. Landscaping and open space plan. A detailed landscaping and vegetation plan describing the woody and herbaceous vegetation that will be used within and adjacent to stormwater management facilities and practices. The landscaping plan must also include: the arrangement of planted areas, natural and greenspace areas and other landscaped features on the site plan; information necessary to construct the landscaping elements shown on the plan drawings; descriptions and standards for the methods, materials and vegetation that are to be used in the construction; density of plantings; descriptions of the stabilization and management techniques used to establish vegetation; and a description of who will be responsible for ongoing maintenance of vegetation for the stormwater management facility and what practices will be employed to ensure that adequate vegetative cover is preserved.
  10. Operations and maintenance plan. Detailed description of ongoing operations and maintenance procedures for stormwater management facilities and practices to ensure their continued function as designed and constructed or preserved. These plans will identify the parts or components of a stormwater management facility or practice that need to be regularly or periodically inspected and maintained, and the equipment and skills or training necessary. The plan shall include an inspection and maintenance schedule, maintenance tasks, responsible parties for maintenance, ongoing funding sources, access and safety issues. Provisions for the periodic review and evaluation of the effectiveness of the maintenance program and the need for revisions or additional maintenance procedures shall be included in the plan.
  11. Maintenance access easements. The applicant must ensure adequate access from public right-of-way to stormwater management facilities and practices requiring regular maintenance at the site for the purpose of inspection and repair by securing all the maintenance access easements needed on a permanent basis. Such access shall be sufficient for all necessary equipment for maintenance activities. Upon final inspection



and approval, a plat or document indicating that such easements exist shall be recorded and shall remain in effect even with the transfer of title of the property. Regular maintenance shall be the responsibility of the homeowner's association or the property owner.

12. Inspection and maintenance agreements. Unless an on-site stormwater management facility or practice is dedicated to and accepted by the City Engineer, as provided in Section 7.09.00, the applicant must execute an easement and an inspection and maintenance agreement binding on all subsequent owners of land served by an on-site stormwater management facility or practice in accordance with Section 7.14.00.
13. Evidence of acquisition of applicable environmental permits. The applicant shall certify and provide documentation to the City Engineer that all other applicable environmental permits have been acquired for the site prior to approval of the stormwater management plan.

## **7.09.00 STORMWATER MANAGEMENT INSPECTION AND MAINTENANCE AGREEMENTS**

Prior to the issuance of any permit for a land development activity requiring a stormwater management facility or practice hereunder and for which the City Engineer requires ongoing maintenance, the applicant or owner of the site must, unless an onsite stormwater management facility or practice is dedicated to and accepted by the City Engineer, execute an inspection and maintenance agreement, and/or a conservation easement, if applicable, that shall be binding on all subsequent owners of the site.

### **7.09.01 APPROVAL REQUIRED**

The inspection and maintenance agreement, if applicable, must be approved by the City Engineer prior to plan approval, and recorded in the office of the Carroll County Clerk of Superior Court, real estate division, upon final plat approval.

### **7.09.02 AGREEMENT REQUIREMENTS**

The following items shall be included in the inspection and maintenance agreement:

- A. The inspection and maintenance agreement shall identify by name or official title the person(s) responsible for carrying out the inspection and maintenance. Responsibility for the operation and maintenance of the stormwater management facility or practice, unless assumed by a governmental agency, shall remain with the property owner and shall pass to any successor owner(s). If portions of the land are sold or otherwise transferred, legally binding arrangements shall be made to pass the inspection and maintenance responsibility to the appropriate successors in title. These arrangements shall designate for each portion of the site, the person to be permanently responsible for its inspection and maintenance.

- B. The inspection and maintenance agreement shall include a schedule for when and how often routine inspection and maintenance will occur to ensure proper function of the stormwater management facility or practice. The agreement shall also include plans for annual inspections to ensure proper performance of the facility between scheduled maintenance and shall also include remedies for the default thereof.
- C. The City of Carrollton Mayor and City Council may, upon recommendation by the City Manager, accept in lieu of an inspection and maintenance agreement the dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this article and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

#### **7.10.00 PERFORMANCE GUARANTEE**

Prior to issuance of a stormwater management permit under this article, the applicant shall provide to the City sufficient financial security to guarantee the performance of stormwater management facilities for a period of two (2) years after the final plat is recorded or a certificate of occupancy is issued, as described in the applicant's approved stormwater management plan. The applicant's financial guarantee may be any of the following:

- A. An escrow of funds with the City;
- B. An escrow with a bank or savings and loan association upon which the City can draw funds;
- C. An irrevocable letter of commitment or credit upon which the City can draw funds;
- D. A certificate of deposit with assignment letter; or
- E. Any other form of guarantee approved by the Mayor and City Council that will satisfy the objectives of this article.

The guarantee shall be in an amount necessary to secure the full costs, as determined by the City Engineer, of constructing, installing or maintaining the stormwater management facilities required by this Article. In the event the applicant or responsible person fails to ensure adequate maintenance pursuant to the approved stormwater management plan, the City Engineer may elect to take those steps necessary to correct the defective maintenance pursuant to the provisions of Section 7.15.00.

#### **7.11.00 STORMWATER MANAGEMENT PERMIT APPLICATION**

##### **7.11.01 APPLICATION PROCEDURE**

- A. Applications for stormwater management permits shall be filed with the City Engineer. Permit applications shall include the items set forth in Section 7.06.00 of this article (two (2) copies of the stormwater management plan and the inspection maintenance agreement, if applicable, shall be included).

- B. The City Engineer shall notify the applicant in writing within 30 days of receipt of the completed application whether the application, stormwater management plan, and inspection and maintenance agreement are approved or denied.
- C. If the permit application, stormwater management plan or inspection and maintenance agreement are denied, the written notification from the City Engineer shall specify the reasons for the denial, and the applicant may then revise any item not meeting the requirements hereof and resubmit the same. Such resubmittal shall be treated as a new application; however, no new application fee shall be required.
- D. Upon a finding by the City Engineer that the stormwater management permit application, stormwater management plan, and inspection and maintenance agreement, if applicable, meet the requirements of this article, the City Engineer shall issue a stormwater management permit for the land development project, provided all other legal requirements for the issuance of such permit have been met.
- E. Notwithstanding the issuance of the stormwater management permit, in conducting the land development project, the applicant or other responsible person shall be subject to the following requirements:
  - 1. The applicant shall comply with all applicable requirements of the approved plan and this article and shall certify that all land development will be completed according to the approved plan.
  - 2. The land development project shall be conducted only within the area specified in the approved plan.
  - 3. No changes may be made to an approved stormwater management plan without review and written approval by the City Engineer.
  - 4. Upon completion of the land development project, the applicant or other responsible person shall submit the engineer's report and certificate and as-built plans pursuant to Section 7.14.02 of this Article.

#### **7.11.02 PERMIT APPLICATION FEES**

The fee for review of an application for a stormwater management permit shall be based on the fee structure established by the City of Carrollton Mayor and City Council. The total fee due shall be submitted with the application and review of the application shall not begin until the permit application fee is paid in full.

#### **7.12.00 STORMWATER MANAGEMENT MODIFICATIONS FOR OFF-SITE FACILITIES**

The stormwater management plan for each land development project should provide for stormwater management measures located on the site of the project. Where the physical characteristics of the site so dictate, as determined by the City Engineer, the applicant may be allowed to modify the stormwater management plan to utilize an off-site or regional stormwater management facility. A modified

stormwater management plan must be submitted to the City Engineer that shows the adequacy of the off-site or regional facility.

### **7.12.01 ELIGIBILITY**

To be eligible for a modification, the applicant must demonstrate to the satisfaction of the City Engineer that the use of an off-site or regional facility will not result in the following impacts to upstream or downstream areas:

- A. Increased threat of flood damage to public health, life safety, and property.
- B. Deterioration of existing culverts, bridges, dams, and other structures.
- C. Accelerated streambank or streambed erosion or siltation.
- D. Degradation of in-stream biological functions or habitat.
- E. Water quality impairment in violation of state water quality standards, and/or violation of any state or federal regulations.

The off-site or regional facility must be:

- A. Located on property legally dedicated for the purpose.
- B. Designed and adequately sized to provide a level of stormwater quantity and quality control that is equal to or greater than that which would be afforded by on-site practices.
- C. There must be a legally-obligated entity responsible for long-term operation and maintenance of the off-site or regional stormwater facility.

In addition, on-site measures shall be implemented, where necessary, to protect upstream and downstream properties and drainage channels from the site to the offsite facility.

## **7.13.00 POST-DEVELOPMENT STORMWATER MANAGEMENT PERFORMANCE CRITERIA**

### **7.13.01 WATER QUALITY**

All stormwater runoff generated from a site shall be adequately treated before discharge. It will be presumed that a stormwater management system complies with this requirement if:

- A. It is sized to treat the prescribed water quality treatment volume from the site, as defined in the Georgia Stormwater Management Manual.
- B. Appropriate structural stormwater controls or non-structural practices are selected, designed, constructed or preserved, and maintained according to the specific criteria in the Georgia Stormwater Management Manual.
- C. Runoff from hotspot land uses and activities identified by the City Engineer are adequately treated and addressed through the use of appropriate structural stormwater controls, non-structural practices, and pollution

prevention practices.

### **7.13.02 STREAM CHANNEL PROTECTION**

Protection of stream channels from bank and bed erosion and degradation shall be provided by using all of the following three approaches. The City Engineer may modify or waive the requirements of this section for sites that discharge directly into larger streams, rivers, wetlands, or lakes, or to a manmade channel or conveyance system where the reduction in these flows will not have an impact on upstream or downstream streambank or channel integrity.

- A. Preservation, restoration and/or reforestation (with native vegetation) of the applicable stream buffer.
- B. 24-hour extended detention storage of the 1-year, 24-hour return frequency storm event.
- C. Erosion prevention measures such as energy dissipation and velocity control.

### **7.13.03 OVERBANK FLOODING PROTECTION**

Downstream overbank flood and property protection shall be provided by controlling (attenuating) the post-development peak discharge rate to the pre-development rate for the 25-year, 24-hour return frequency storm event. If control of the 1-year, 24-hour storm under subsection 7.13.02 is waived or modified, then peak discharge rate attenuation of the 2-year through the 25-year return frequency storm event must be provided. The City Engineer may modify or waive the provisions of this subsection for sites where the post-development downstream analysis shows that uncontrolled post-development conditions will not increase downstream peak flows, or that meeting the requirement will cause greater peak flow downstream impacts than the uncontrolled post-development conditions.

### **7.13.04 EXTREME FLOODING PROTECTION**

- A. Extreme flood and public safety protection shall be provided by controlling and/or safely conveying the 100-year, 24-hour storm event such that flooding is not exacerbated.
- B. Extreme flood protection shall be provided either by controlling the 100-year, 24-hour return frequency storm event through on-site or regional structural stormwater controls to maintain the existing 100-year floodplain and/or by sizing the on-site conveyance system to safely pass the 100-year, 24-hour return frequency storm event and allowing it to discharge into a receiving water whose protected floodplain is sufficiently sized to account for extreme flow increases without causing damage.
- C. The City Engineer may modify or waive the provisions of subsection (A) for sites where the post-development downstream analysis shows that uncontrolled post-development conditions will not increase downstream peak flows, or that meeting the requirement will cause greater peak flow downstream impacts than the uncontrolled post-development conditions.

### **7.13.05 STRUCTURAL STORMWATER CONTROLS**

- A. All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the Georgia Stormwater Management Manual. All structural stormwater controls must be designed appropriately to meet their intended function. For other structural stormwater controls not included in the Georgia Stormwater Management Manual, or for which pollutant removal rates have not been provided, the effectiveness and pollutant removal of the structural control must be documented through prior studies, literature reviews, or other means and receive approval from the City Engineer before being included in the design of a stormwater management system.
- B. Applicants shall consult the Georgia Stormwater Management Manual for guidance on the factors that determine site design feasibility when selecting and locating a structural stormwater control.

### **7.13.06 STORMWATER CREDITS FOR NON-STRUCTURAL MEASURES**

The use of one or more better site design measures by the applicant may allow for a reduction in the water quality treatment volume required under Section 7.13.01. The applicant may, if approved by the City Engineer, take credit for the use of stormwater better site design practices and reduce the water quality volume requirement. For each potential credit, there is a minimum set of criteria and requirements which identify the conditions or circumstances under which the credit may be applied. The site design practices that qualify for this credit and the criteria and procedures for applying and calculating the credits are included in the Georgia Stormwater Management Manual.

### **7.13.07 DRAINAGE SYSTEM GUIDELINES**

- A. Stormwater conveyance facilities, which may include but are not limited to culverts, stormwater drainage pipes, catch basins, drop inlets, junction boxes, headwalls, gutters, swales, channels, ditches, and energy dissipaters, shall be provided when necessary for the protection of public right-of-way and private properties adjoining project sites and/or public rights-of-way. Stormwater conveyance facilities that are designed to carry runoff from more than one parcel, existing or proposed, shall meet the following requirements:
  - 1. Methods to calculate stormwater flows shall be in accordance with the Georgia Stormwater Management Manual.
  - 2. All culverts, pipe systems, and open channel flow systems shall be sized in accordance with the stormwater management plan using the methods included in the Georgia Stormwater Management Manual.
  - 3. Design and construction of stormwater conveyance facilities shall be in accordance with the criteria and specifications found in the Georgia

Stormwater Management Manual.

**7.13.08 DAM DESIGN GUIDELINES**

Any land development activity that involves a site which proposes a dam, as such term is defined by O.C.G.A. § 12-5-372(4), shall comply with the Georgia Safe Dams Act and Rules for Dam Safety, as applicable.

**7.14.00 CONSTRUCTION INSPECTION OF POST-DEVELOPMENT  
STORMWATER MANAGEMENT SYSTEM**

**7.14.01 INSPECTIONS TO ENSURE PLAN COMPLIANCE  
DURING CONSTRUCTION**

- A. Periodic inspections of the stormwater management system construction shall be conducted by the City Engineer or conducted and certified by a Professional Engineer (P.E.) licensed in the State of Georgia, a registered landscape architect (RLA), or a registered surveyor who has been approved by the City Engineer. However, the P.E. or RLA who conducts the periodic inspection, if applicable, shall not be the person who certifies the plans pursuant to Section 7.14.02. The purpose of the inspections shall be to establish compliance with the approved stormwater management plan.
- B. All inspections shall be documented with written reports that contain the following information:
  - 1. The date and location of the inspection.
  - 2. Whether construction is in compliance with the approved stormwater management plan.
  - 3. Variations from the approved construction specifications.
  - 4. Any other variations or violations of the conditions of the approved stormwater management plan.
- C. If any violations are found the applicant shall be notified in writing in accordance with the provisions of Section 7.15.00.

**7.14.02 FINAL INSPECTION AND AS-BUILT PLANS**

Upon completion of a project, and before a certificate of occupancy shall be granted or a final plat recorded, the applicant shall be responsible for certifying that the completed project is in accordance with the approved stormwater management plan. All applicants are required to submit actual "as-built" plans for any stormwater management facilities or practices after final construction is completed. The plan must show the final design specifications for all stormwater management facilities and practices and must be certified by a P.E. licensed in the State of Georgia or an RLA. A final inspection by the City Engineer is required before the release of any performance securities can occur. The City Engineer may verify the accuracy of the submitted as-built plans prior to the issuance of a final recorded plat or

certificate of occupancy.

## **7.15.00 VIOLATIONS AND PENALTIES**

### **7.15.01 NOTICE OF VIOLATION**

If the City Engineer determines that an applicant or other responsible person has failed to comply with the provisions of this article or is engaged in activity covered by this article without having first secured a stormwater management permit, a notice of violation shall be served on the owner or the responsible person in charge of the activity being conducted on the site. The applicant or other responsible person shall be provided a reasonable opportunity, of not less than 10 days, to cure such violation; except, that in the event the violation constitutes an immediate danger to public health or public safety, 24-hours' notice shall be sufficient. The notice of violation shall contain:

- A. The name and address of the owner or the applicant or the responsible person.
- B. The address or other description of the site upon which the violation is occurring.
- C. A statement specifying the nature of the violation.
- D. A description of the remedial measures necessary to bring the action or inaction into compliance with the stormwater management permit, the stormwater management plan, or this article and the date for the completion of such remedial action.
- E. A statement of the penalty or penalties that may be assessed against the person to whom the notice of violation is directed.

### **7.15.02 PENALTIES**

In the event the remedial measures described in the notice of violation have not been completed by the date set forth for such completion in the notice of violation, any one or more of the following actions or penalties may be taken or assessed against the person to whom the notice of violation was directed:

- A. Stop work order. The City Engineer may issue a stop work order that shall be served on the applicant or other responsible person. The stop work order shall remain in effect until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein, provided the stop work order may be withdrawn or modified to enable the applicant or other responsible person to take the necessary remedial measures to cure such violation or violations.
- B. Withhold certificate of occupancy. The City Engineer may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site until the applicant or other responsible person



has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

- C. Suspension, revocation or modification of permit. The City Engineer may suspend, revoke or modify any permit authorizing the land development project. A suspended, revoked or modified permit may be reinstated after the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein, provided such permit may be reinstated (upon such conditions as the City Engineer may deem necessary) to enable the applicant or other responsible person to take the necessary remedial measures to cure such violations.
- D. Citation. The City Engineer, or his designee, may issue a citation to the applicant or other responsible person requiring such person to appear in the Municipal Court of the City of Carrollton to answer charges for such violation. Each act of violation and each day upon which any violation shall occur shall constitute a separate offense.